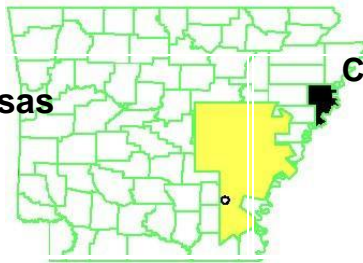


**GURLEY PITS  
SUPERFUND SITE  
Crittenden County, Arkansas**

**EPA ID# ARD035662469  
Site ID: 0600077**



**EPA REGION 6  
CONGRESSIONAL DISTRICT 01**

**Contact: Ruben Moya  
214-665-2755**

**Updated: September 2012**

**This site was deleted from the National Priorities List on November 6, 2003.**

## **Background**

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Gurley Refining Company (GRC), leased the property for use as a disposal area in 1970. The site was divided into three pits for disposal of sludges from the refining of used oil with major contaminants including lead, barium, zinc, and PCBs. Waste disposal operations were permitted by the Arkansas Department of Pollution Control and Ecology (ADPC&E) from 1970 until 1975.

In May 1975, an inspection by the ADPC&E revealed that GRC was discharging contaminated storm water from the pit into Fifteen Mile Bayou without treatment. ADPC&E notified GRC it had one year to implement site cleanup and remedial measures. In October 1975, GRC said that it had closed the part of its refining operation which generated the wastes disposed at the site. In December 1975, GRC notified ADPC&E that waste disposal at the site had ceased and that the site was secure. Releases to the bayou from the pit were documented in both 1978 and 1979.

## **Current Status**

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The first Five-Year review was completed and signed 1/09/97 by EPA and EPA signed the Final Site Close Out Report 7/31/98. State of Arkansas submitted on 11/09/98 the Operation & Maintenance (O&M) and Sampling & Analysis (SA) Plans. EPA approved the State O&M and Sampling and Analysis (SA) Plans on January 8, 1999 and the site is under State O& M by Arkansas Department of Environmental Quality (ADEQ). Second Five-Year Review signed by EPA September 30, 2002. The site final Fourth (4<sup>th</sup>) five-year review has been written and is in concurrence routing.

## **Benefits**

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The principal pollutants at the Gurley Pit Superfund site include PCB (sludge and oil), barium, lead and zinc (surface water, soil and sludge). A volume of pollutants include 20,000 yd<sup>3</sup> of sludge, which was treated, stabilized and placed in a RCRA type vault. A fence was constructed around the perimeter and the site was secured with a locked gate and posted in December 1992 and the riser pipe slot modifications and water removal were complete. Baseline air monitoring was also initiated during the same period. Construction of the RCRA with treated vault was completed in the Fall of 1994. The prior site discharges of contaminants into Fifteen-Mile Bayou, and the prior light oil which slick posed a threat to migratory waterfowl and the adjacent residents have been eliminated.

## National Priorities Listing (NPL) History ---

Proposed Date: 12/30/82

Final Date: 9/08/82

## Site Description ---

- Location:** The Site is located approximately one mile north of the Town of Edmondson, in Crittenden County, Arkansas at the Northwest corner of intersection of County Roads 14 and 175.
- Population:** Approximately 285 people live in Edmondson, which is within a one-mile radius of the site. The land use is primary farming/agricultural and residential with localized transportation.
- Setting:** Nearest residence is adjacent to site and the nearest drinking water well is 2.2 miles southeast. Although a rural area, 5 residences are located within 0.5 mile radius of the site.
- Hydrology:** The localized ground water is about 9 feet below ground surface and the site is located in the 100-year floodplain of Fifteen Mile Bayou. The Site is under laid by 24 feet to 42 feet of low permeability clays.

## Wastes and Volumes ---

The principal pollutants at the Gurley Pit Superfund site include PCB (sludge and oil), barium, lead and zinc (surface water, soil and sludge).

The volume of pollutants includes 20,000 yd<sup>3</sup> of sludge. The pits were de-watered in the summer of 1989.

The Arkansas Department of Environmental Quality (ADEQ), formerly known as The Arkansas Department of Pollution Control and Ecology (ADPC&E), noted a concern with the aquifer designation. The U.S. Department of Interior noted that the site discharged contaminants to Fifteen-Mile Bayou, and that a light oil slick posed a threat to migratory waterfowl.

## The Remediation Process ---

### Site History:

Gurley Refinery leased property from R. A. Caldwell in 1970. - Gurley used pit on property to dispose of waste from 1970 to 1975, and in 1976, the lease terminated, and the pit was abandoned. In July 1978 the area flooded, causing emergency cleanup of oil from pit by EPA.

After a flood in 1979, EPA performed an emergency removal of oil from the pit and installed drains and pumps to remove accumulated storm water.

In May 1984, the Potentially Responsible Party (PRP) installed a fence and repaired dikes. August 1989 - Emergency Removal performed by the PRPs to lower water level in the pits and reinforce berms.

## Health Considerations

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Direct contact and public use of shallow aquifer as a source of drinking water were addressed by the remedy.

Other Environmental Risks:

Pit overflowed into a nearby stream. The pit posed a threat to surface water, waterfowl and local residents.

## Record of Decision

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The Record of Decision for the Source Control was signed on October 6, 1986.

Source Control:

Stabilize sludges and place within an onsite Resource Conservation and Recovery Act (RCRA) vault. Treat and discharge water.

The Record of Decision for the Ground Water was signed on September 26, 1988.

Ground Water:

A Feasibility Study was not conducted since the Remedial Investigation indicated that the ground water contained no site-related contaminants and that the potential for future contamination would be prevented by the implementation of the source control remedy (i.e. - no need for further action).

<u>Other Remedies Considered</u>	<u>Reason Not Chosen</u>
1. No Action	Already releases from site
2. Stabilize and cap	Not possible due to high organic content of waste
3. Stabilize in place	(same as above)
4. Incineration offsite	Transportation and safety problem/cost

## Community Involvement

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Community Involvement Plan: 04/84, revised 01/88.

Open houses and workshops: 12/92; 1/93; 3/93; 12/93; 5/94; 8/94.

Original Proposed Plan Fact Sheet and Public Meeting: Source 05/86; Ground water 08/88.

Original ROD Fact Sheet: Source 01/87; Ground water 10/88.

Milestone Fact Sheets: Update released 1/90; Fact Sheet 01/93; Fact Sheet 10/94

Citizens on site mailing list: 39

Constituency Interest: Low organized interest; individual interest appears high.

- Major concern was the odor, and the danger of children falling into the pits.
- Locals are concerned about the safety of eating fish.

Site Repository: Edmondson City Hall, Edmondson, Arkansas

## Technical Assistance Grant

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Availability Notice: 01/89

Letters of Intent Received: None

Grant Award: N/A

## **Contacts**

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